DEVELOPING CAREERS: HOW YOUNG PEOPLE BECOME EXPERIENCED SKILLED WORKERS

1. Introduction

This Bulletin draws upon recent ESRC research conducted by Alan Brown of the Institute for Employment Research. That research, however, was the culmination of a ten year longitudinal research programme into skill formation processes in England, Germany and the Netherlands, in which many researchers were involved (see, for example, Bynner and Roberts, 1991; Evans and Heinz 1994; van der Aa 1994). We highlight some of the characteristics associated with becoming an experienced skilled worker in Europe during a time of transition involving great technological, organisational and political change. What range of skills, attributes and opportunities are now required of young people to maintain a skilled 'career', now that the traditional model of a typical progressive career, based upon possession of a particular set of occupational skills, has been largely undermined? The factors that influence the processes of becoming skilled can be grouped into four levels:

- systemic level: the nature of the institutional pathways for becoming skilled within the education, training and employment system as a whole;

- local contexts: the particular local labour market, organisational and occupational contexts operating at a given time;

- quality of support from other people: significance of coaching, tutoring and recognition by others;

- characteristics of individuals: skills, attributes, motivation and commitment.

After giving the background to the research and outlining the model of occupational identity formation developed during the research, examples are given of significant influences at three of the four levels. The influence and constraints of the institutional pathways upon the processes of becoming skilled are important, but these will be the subject of a separate Bulletin.

The comparative research on skill formation processes in England and Germany (and later in the Netherlands) started in 1987. The main focus of this strand of the research was upon the development of young adults (from age 16 to 25) through to experienced skilled worker status in eight different occupational areas in the broadly matched labour markets of Swindon, Paderborn and Eindhoven. The eight occupational areas (engineering, electrical, heating and ventilation, pharmacy dispensing, hairdressing, nursing, banking and insurance) were chosen to cover a mix of firms, labour market sectors and stereotypical male, female and mixed occupational routes. The skill formation processes in the different occupational areas were tracked using an innovative methodology of progressive close matching, whereby closely matched triplets of young people were selected for interviewing on the processes, content and meaning of becoming skilled. Altogether about fifty young people were tracked through to experienced skilled worker status in the three countries.

2. A model of occupational identity formation

The research developed a model of occupational identity formation with the following characteristics. It was a dynamic representation, allowing for change and development over time; with a strong social dimension, whereby an individual learns, works and interacts with
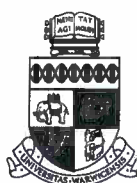
others. It also allowed the individual to be a significant actor in the construction of her or his own occupational identity; and recognised the existence of general and particular 'communities of practice' associated with particular occupations and organisations, and acknowledged that these can operate at a number of levels. A diagrammatic representation of the model developed is outlined in Figure 1.

Figure 1:
Model of occupational identity formation
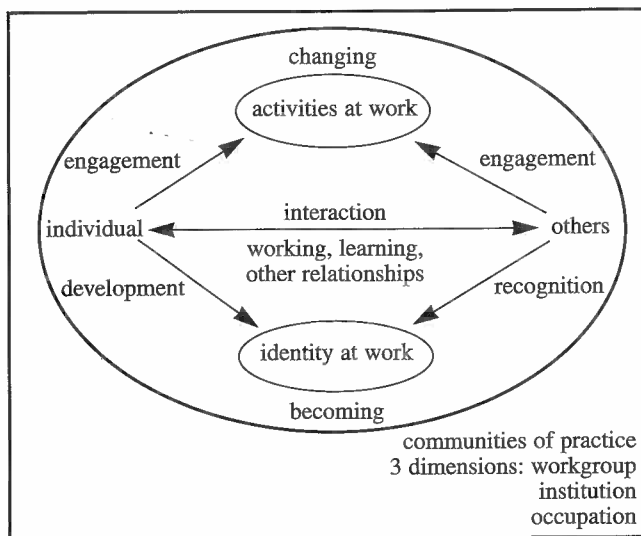
What is difficult to convey in two dimensions is the dynamic, developmental nature of the model. The sets of activities at work and communities of practice and the identities they support are all changing, and not all aspects of these activities, practices and identities are passively received by those engaging in them while in the process of becoming skilled. Rather the 'about to be qualified' and 'newly qualified' may play an important role in changing aspects of those activities, practices and identities. Indeed an understanding of such dynamism is required if a fundamental tension about occupational identity formation processes is to be recognised: that is, there is both continuity and change in how these processes work out over time.

The process of becoming skilled is a social activity, in which a number of others have an interest besides the individual directly concerned. While acknowledgement of formal status as a skilled worker may come through completion of an apprenticeship or achievement of a similar status, both the individuals themselves and others may be wary of conferring the epithet 'fully skilled' at this time. That is more likely to come when the individual and others recognise that he or she is an 'experienced skilled worker'. Indeed there will often be a negotiation of meaning, whereby you are only an experienced skilled worker when you yourself and others recognise you as such.

One clear sign of recognition comes when others (for example, clients, peers or trainees) turn to the individual for advice, because they acknowledge the individual possesses valued skill, knowledge, expertise or experience which is acquired over time. External recognition can also come from management, through job grading and/or the type of work allocated to the individual, or through the type of work he or she can get in the external labour market.

Experienced skilled worker status is not acquired at a precise point of time, because when an individual reaches this status depends on judgements of a number of people, who may be using different criteria in forming their judgements. However, besides external recognition an individual also has to recognise the value of her or his own skills. That is, he or she has to have a sense of self worth and a belief that he or she owns significant skills.

3. Local contextual influences on the processes of becoming skilled

The local labour market can be influential in the way it facilitates and/or constrains the opportunities individuals have for becoming skilled (Bynner and Roberts 1991). In a similar vein, the particular institutions, organisations and groups an individual comes into contact with during the process of becoming skilled can be significant. One way of looking at these influences is to make use of the idea of **entry into a community of practice** (Lave 1991). This means that learning is seen as a social process; that processes of becoming skilled take place within a broader process of identity formation; and that recognition of significant achievement (and attainment of the status of experienced practitioner) is itself a social process, dependent on the recognition of others and a sense of self-worth. That is, individuals are developing occupational identities that need to be related to particular contexts and types of practice. The following gives examples of this drawn from the research.

That individuals who became formally skilled were in the process of entering an occupational community of practice was most evident in Germany, where the whole initial vocational education and training system is driven by the principle of 'Beruf' (or skilled occupational status). However, within school-based initial vocational education and training the de facto community of practice within which the individual spends most time is the school, college or training institution. As a consequence, individuals may feel that they are still a considerable way from acquiring the full occupational identity in such circumstances, even if they are technically well-equipped to carry out the required work tasks. Certainly German and Dutch workers who had completed full-time vocational education felt they were 'skilled workers in waiting' until they had demonstrated to

themselves and others that they could do the work in practice.

That individual institutions had their own distinctive communities of practice could be gauged from the way they structured their work activities and in their attitudes to training. In the Netherlands, a training manager at one bank emphasised that their development, organisational structure and customer base were all sufficiently distinctive, such that someone training and working in their bank for several years would typically end up with a different skill mix from their equivalents in other banks. One German engineering employer stressed to prospective apprentices that they would get a very different, and much more practical, training from that on offer at the other major employer in the town.

Particular workgroups may have their own distinctive community of practice too. This is perhaps likely to be strongest where a specialist group is set up within a larger organisation, with people from a mix of occupational backgrounds, a different set of work activities and a different pattern of inter-relationships with other work groups. Such groups may consciously define themselves as 'special'. Both in engineering and insurance, some young workers reported that specialist units, concerned with future development, had their own distinctive ways of working.

An emphasis upon entry into a community of practice should not be seen as a passive process whereby the individual simply takes on existing identities and roles. Individuals may take pro-active roles in becoming full participants in a changed community of practice, which has been partly changed by their efforts. Hence there is scope for individuals to act upon the structures and processes in such a way that a new community of practice develops.

4. The significance of the recognition of others on processes of becoming skilled

The reaction of others can have direct or indirect effects on perceptions that the individual and/or others have on the developing identity of a skilled worker. This is perhaps most marked when the work activities are themselves changing rapidly. In one case a nurse made the point forcefully that the way she engaged with her work was disapproved of by some more senior nursing staff. This was not because of any failure to perform competently, but rather because it did not 'fit' with the way they engaged with their work, currently and in the past. At the heart of this was a feeling of the senior nursing staff that the relatively newly qualified nurse was too 'pushy': confident in her own judgements, ready to voice her opinion and not afraid to challenge the decisions of more senior colleagues. They did not feel that she accorded either doctors or

themselves the respect that was their due. Their negative labelling of her indicates that an individual cannot necessarily control aspects of something as fundamental as their identity at work.

How an individual is perceived by other workgroup members, managers, other workers, trainees, clients and so on can all be influential in the formation of an occupational identity and an identity at work. The judgements of others may not necessarily be consistent and, even if they were, people may ascribe different values to a particular characteristic. Thus a thorough painstaking approach to work may be appreciated by trainees and some clients ('conscientious; professional'), but be seen as irritating by managers and other clients ('too slow'). The formation, development, maintenance and change of an occupational identity, and/or identities at work, are influenced by the nature of the relationships around which they are constructed. Thus the recognition of others is significant in signalling to individuals the progress they are making towards their goal of becoming experienced skilled workers. In this respect, the support of a coach at work can help speed progress towards that goal.

5. Characteristics of individuals that contribute to successful transitions through to experienced skilled worker status

5.1 Individual engagement with (changing) activities at work

Individuals learn how to engage in the activities at work in the way they do. It was very striking the way that management in some companies (for example, in insurance in Swindon; in engineering in Paderborn) had very clear ideas of what they considered to be appropriate ways for their skilled workers, and those in the process of becoming skilled, to engage with their work. Individuals reacted very differently to such expectations. In the English insurance company, one of our respondents found the 'company way' oppressive. She reacted so strongly against the pattern of activities she was expected to undertake, and the way in which she was expected to undertake them, that for her these became defining characteristics of what she did not intend to become. She just could not engage with the work she was expected to do.

On the other hand, another respondent at the same company bought into the company imagery of a 'ladder of opportunity' for those demonstrating commitment to their work. He was promoted five or six times during his first five years with the company. He was given supervisory responsibilities and then asked to undertake a specialist role in computer analysis of future trends in a newly formed work unit. This specialist role required engagement with a

set of activities that were not only new to him, but also new to the company.

Between these extremes of complete rejection and complete engagement, young skilled workers exhibited a wide range of attitudes and behaviours in the extent to which they engaged with the activities they performed at work. Thus, for example, two (German and Dutch) pharmacy dispensing assistants rapidly came to terms with the relative lack of challenge in their work: the work was thought to match quite well both with their prior education and training and their desire for work which contained some interest, but was not too demanding.

By contrast, two other pharmacy dispensing assistants did not think the work engaged them sufficiently. One (English) pharmacy dispensing assistant sought initially to broaden the range of activities she engaged in within the shop, but outside the pharmacy itself. Subsequently she was promoted, and given supervisory and training responsibilities. The second (Dutch) pharmacy dispensing assistant looked for a more demanding job, and eventually secured employment in a hospital pharmacy, where she carried out a wider range of work activities and where the work was seen as generally more challenging.

5.2 Extent to which young people were proactive in the development of their own occupational identities

One major distinction between young people was the extent to which they saw themselves as active in constructing their own identity, and in how they perceived their developing occupational identity. Some young people (in hairdressing and insurance) rather passively accepted their place at work: they saw themselves as likely to be doing broadly similar work with their current employer for the foreseeable future. They were not operating with any progressive notion of career, nor did they have any great expectations of work. Their identity at work seemed bound up with being an 'ordinary' (rather than a 'special') worker: doing the job steadily, without entertaining thoughts of promotion or changing employers.

On the other hand, in the same occupational areas (hairdressing and insurance) there were examples of young people who were actively constructing dynamic identities, in which occupational success was an important factor. The (English) hairdresser had worked hard, taking part-time employment in a sports centre during her training and initially while working as a hairdresser. This was to give her the financial base to set herself up and establish herself as a mobile hairdresser. However, she also built up expertise in a range of complementary services (beauty therapy, aromatherapy and the like), such that she would be able to offer a fairly comprehensive range of beauty services to her clients. The flexible nature of her work, and

the fact that as she was self-employed she was in control of her work, were also bound up with her broader identity. She was married and intended to have a family in the near future. She felt she could combine her work, expanding or reducing its extent as appropriate, with child-care responsibilities. Longer-term too, she felt the flexibility of the work would mean that she could effectively finance any training she might wish to undertake, if she wanted to move into a completely different occupational area.

One of the (German) insurance workers was similarly pro-active in constructing his own particular identity. After completing a couple of years experience after formal qualification as a skilled worker, he was offered a new promoted post at work. However, rather than accepting the job immediately, he advertised his services as an experienced skilled worker in a regional newspaper. He received over a dozen replies from companies, and after talking to five or six of these companies, he opted to work for a particular company. The reason he chose that company was because of the nature of the work they offered him. This involved offering specialist advice to major banking companies upon significant changes affecting the insurance industry. This work was at the 'leading edge', involving research and analysis every month. He felt he would learn a great deal, and that this would put him in an excellent position several years in the future to seek other employment, utilising his specialist expertise, or to set up as an independent consultant.

5.3 Extent to which young people have learned to learn

The pace of change in many aspects of work and the work environment puts a premium upon the ability to learn. Learning to learn is fundamental if workers are to be able to adjust to changes in organisational structures, technological innovation and almost constant change to work processes (Dutch Ministry of Education and Science, 1993). One key attribute, associated with initial skills development, which needs to be developed is the ability 'to pick up the threads' in future when skills need updating (Brown et al 1991). That is, young people need to be confident about their ability to learn in future.

A number of young people (for example, in banking; heating and ventilation; pharmacy dispensing) were engaged in significant continuing education or continuing professional development activities. They were following recognised paths leading to higher technical, supervisory or training qualifications, and they hoped that these, coupled with their experience of work, would open up new employment opportunities. In such circumstances, they had a current occupational identity but were also in the process of going beyond that, and this progression was partly based around their commitment to continue learning.

5.4 Possession of transferable skills

The value of the development of transferable or key skills is now widely acknowledged and an essential task of further education and training is to incorporate these broad skills into learning programmes (Brown et al 1991). The increasing pressure on many workers to be able to adapt quickly, perform a wide range of tasks and work in integrated environments mean that not only are a greater range of technical skills required, but also that greater demands are made upon the use of key skills (Dankbaar 1995).

If one intention of a learning programme is to help learners develop the ability to transfer skills, knowledge and understanding, then learning contexts are required which draw attention to the significance of skill transfer (Blagg et al 1992). Exposure to a range of contexts then can be valuable both for the way it can enhance and lead to a more complete ownership of a skill (Hayes et al 1983) and because it allows learners to make connections (and think about transfer) between contexts. Overall then, it is important to ensure that a sufficient range and quality of learning opportunities are available for individuals to develop their key skills.

5.5 Extent to which young people have mastered a substantive knowledge base

One response to the speed with which the knowledge underpinning skilled activity is changing is to argue that as long as individuals have the capacity to learn the new information, then less emphasis needs to be given to mastery of an initial knowledge base. This argument should be treated with caution, not least because the mastery of a substantive knowledge base could itself be regarded as an important process skill. In order to become experienced skilled workers learners should have the opportunity to build a substantive knowledge base, mastery of which is an important component of intellectual development associated with the development of expertise (van Luijk and van der Vleuten 1990) and is central to experts' problem-solving strategies (Chi et al 1988).

Developing an extensive knowledge base is also crucial to what is learned in future in the development of expertise (Achtenhagen 1994), as depth of knowledge, going beyond that required to underpin current competence, can be used in a reflective or recontextualising way to inform subsequent practice (Fleming 1992). What is now required are more imaginative ways of **integrating** knowledge acquisition, problem-solving and key skills development in work-related activities, which are relevant to the workplace and meaningful for the learner (Achtenhagen 1994).

Facilitating learners developing a substantive knowledge base is fundamental to the development of high level occupational competence or expertise, and is a crucial platform for future learning. Additionally, for countries operating at a low skills equilibrium (Finegold and Soskice 1988), such an approach would accord with an attempt to make our vocational education and training more demanding and act as a pressure for a move towards a high skills equilibrium. Such an approach, however, needs to be aligned with practical and active work-based learning, concerned with current and future performance in an holistic approach to the development of competence and expertise.

6. Conclusion

On looking towards the future continuing research and development should focus upon developing breadth and flexibility in skill formation processes, so as to equip young people with the ability to adjust to changes in organisational structures, work processes and technological innovation, as well as with the individual flexibility to re-orient their career direction, if necessary. In order to overcome worries that vocational education and training will be too narrowly focused upon current conceptions of jobs and occupations, which are themselves changing, then:

- the prime focus of the inter-relationship between education, training and employment needs to be upon learning, and learners need to develop effective learning strategies. This requires learners being given opportunities to improve their learning to learn skills, develop their key skills, and a variety of contexts in which to practise skill transfer.

- processes of review and critical reflection are pivotal, and organised reflection on what has and what needs to be learned can act as a bridge between working and learning.

- the attention on the process skills underpinning the ability to be effective in different contexts does not diminish the need for mastery of a substantive occupational knowledge base. The development of process skills should ideally be embedded in appropriate occupational contexts. Further, mastery of a substantive knowledge base is not only central to the development of occupational expertise, but it also forms a platform for continuing learning in the future.

- consideration needs to be given to what are the most effective ways to create an environment supportive of learning in the workplace and what are the process skills that underpin the ability to be effective in different contexts.

7. Acknowledgements

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